

We Claim:

1. A coupling unit, comprising:

a connecting area for connecting to a transmitting and/or receiving module;

a holding area for holding an optical fiber; and

a transparent coupling area for directly coupling light between the optical fiber and the optical transmitting and/or receiving module when the optical fiber is inserted into said holding area and the optical transmitting and/or receiving module is connected to said connecting area;

said transparent coupling area formed integral with said holding area and said connecting area.

2. The coupling unit according to claim 1, wherein:

said coupling area has a side facing said holding area that forms a projecting stop surface for the optical fiber; and

said stop surface is for directly contacting a fiber core of the optical fiber when the optical fiber is inserted into said holding area.

3. The coupling unit according to claim 2, wherein:

said holding area defines a longitudinal axis; and

said stop surface runs at right angles to said longitudinal axis of said holding area.

4. The coupling unit according to claim 1, in combination with the optical fiber, wherein:

the optical fiber has a refractive index; and

said coupling area has a refractive index matched to the refractive index of the optical fiber.

5. The coupling unit according to claim 1, wherein:

said coupling area has a side facing the transmitting and/or receiving module; and

said side facing the transmitting and/or receiving module has an inclined light inlet or light outlet surface.

6. The coupling unit according to claim 1, wherein said transparent coupling area, said holding area, and said

connecting area form a transparent, plastic injection-molded part.

7. The coupling unit according to claim 1, further comprising:

a horizontally running base plate formed with said coupling area therein;

said base plate having an upper face connected to said holding area;

said holding area extending essentially at right angles with respect to said upper face of said base plate; and

said base plate having a lower face connected to said connecting area.

8. The coupling unit according to claim 1, wherein said holding area forms an elongated sleeve with a precision guide.

9. The coupling unit according to claim 1, wherein said holding area is designed for holding a ceramic ferrule having a center configured with the optical fiber.

10. The coupling unit according to claim 1, wherein said connecting area is essentially cylindrical.
11. The coupling unit according to claim 10, wherein said connecting area is designed for connecting to a TO can in which the transmitting and/or receiving module is configured.
12. The coupling unit according to claim 1, further comprising:
 - a horizontally running base plate formed with said coupling area therein;
 - said base plate having an upper face connected to said holding area;
 - said holding area extending essentially at right angles with respect to said upper face of said base plate; and
 - said base plate having a lower face connected to said connecting area;
 - said base plate formed with a cutout passing through said base plate; and

said cutout running adjacent said coupling area of said base plate.